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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/779,421	02/13/2004	Robert H. Wollenberg	T-6320 (538-66)	9070

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Michael E. Carmen, Esq.
M. CARMEN & ASSOCIATES, PLLC
Suite 400
170 Old Country Road
Mineola, NY 11501

EXAMINER

GROSS, CHRISTOPHER M

ART UNIT	PAPER NUMBER
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1639

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/779,421	Applicant(s) WOLLENBERG, ROBERT H.	
	Examiner CHRISTOPHER M. GROSS	Art Unit 1639	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 March 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 and 33-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 and 33-35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>9/12/2008</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Responsive to Board of Patent Appeals and Interferences (BPAI) decision rendered 3/29/2010 . Claims 1-21,33-35 are pending. Claims 1-21,33-35 are examined herein.

Priority

The present application was filed 2/13/2004 and applicant makes no claim of benefit to any earlier application.

Reversed Rejection

The rejection of Claims 1-3,5-9,21 and 15-16 under 35 U.S.C. 103(a) as being unpatentable over **Francisco et al** (US Patent 5,308,522) in view of **Chaffee et al** (US Patent 4,774,281) has been reversed by the BPAI decision of 3/29/2010.

Withdrawn Rejections

The provisional rejection of claims 1-3 on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-4 of copending Application No. 11/582747 in view of Bailey et al (US Patent 3,108,397) is hereby withdrawn in view of applicant's amendments to 11/582747.

The provisional rejection of claim 1 on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1 of copending Application No. 10/699510 in view of Francisco et al (US Patent 5,308,522) is hereby withdrawn in view of applicant's abandonment of application 10/699510.

The provisional rejection of claim 1 on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1 of copending Application No. 11/605127 in view of Francisco et al (US Patent 5,308,522) and Guninther et al (US Patent Application 2004/0074452) is hereby withdrawn in view of applicant's amendments to 11/605127.

The provisional rejection of claim 1 on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1 of copending Application No. 10/699508 in view of Francisco et al (US Patent 5,308,522) and Guninther et al (US Patent Application 2004/0074452) is hereby withdrawn in view of applicant's abandonment of application 10/699508.

The provisional rejection of claim 1 on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1 of copending Application No. 10/699507 in view of Francisco et al (US Patent 5,308,522) and Guninther et al (US Patent Application 2004/0074452) is hereby withdrawn in view of applicant's amendments to 10/699507.

The provisional rejection of claims 1 on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1 of copending Application No. 10/779422 in view of Francisco et al (US Patent 5,308,522) and Guninther et al (US Patent Application 2004/0074452) is hereby withdrawn in view of applicant's amendments to 10/779422.

Affirmed Claim Rejection - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3,5-9, 11-14,17-21, 33-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Francisco et al** (US Patent 5,308,522) in view of **Kolosov et al** (US Patent Application 2004/0123650 – IDS entry 2/16/2006)

Francisco et al teach throughout the document and especially example 3, stress activated activators (I and II) for lubricant compositions which are tested on an elastomer.

The testing of the stress activated activators per Francisco et al includes a base oil and a small amount of different oil additives and therein reads on claim 1 (a). The elastomer tested is taken as the elastomer of claim 1 (b). Data concerning the compatibility of the elastomer is “output” and presented as table 2 by Francisco et al thus reading on claim 1(d).

Also shown in table 2, Francisco et al teach the elastomer compatibility with the oil and additive mixture is discerned by measuring elastomer tensile strength, as compared the tensile strength prior to immersion in the oil mixture, therein reading on claim 1(c) as well as 8 and 9.

Francisco et al teach in column 2, synthetic oils per claim 2. Francisco et al teach detergents (elected species) in column 3, line 43 as set forth in claim 3. Francisco et al

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teach in column 6, line 39 the elastomer is a seal (elected species) as set forth in claims 4 and 5.

Francisco et al teach in column 6, line 59 the elastomer is immersed in the test solution for a predetermined time of 96 hours at and predetermined temperature of 121 degrees C, reading on claim 6 and in the range of claim 7.

Francisco et al teach in column 6, line 61, the oil mixture is diluted with another oil, reading on claim 21.

Francisco et al do not teach sample sizes no more than 10 ml (claim 14), the use of a robotic assembly (claim 17), control by a computer (claim 18), storing data (claims 19,33,35) or using the data of claim 1(c) for further calculations (claim 20).

Kolosov et al teach, throughout the document and especially figure 1 and paragraph 0068 the use of a robot which is controlled by a computer to screen and analyze a library of material samples.

Kolosov et al teach in and paragraph 0021 sample sizes as small a 1 ml, which is in the range of claims 11-14.

It would have been *prima facie* obvious for one of ordinary skill in the art, at the time the claimed invention was made to use the computer controlled robot of Kolosov et al with the elastomer testing protocol of Francisco et al.

One of ordinary skill in the art would have been motivated to use the computer controlled robot of Kolosov et al with the elastomer testing protocol of Francisco et al because of the need to reduce time in analyzing samples and it would be especially

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attractive to rapidly test a plurality of samples on a common substrate, as noted by Kolosov et al in paragraph 0005.

One of ordinary skill in the art would have had a reasonable expectation of success in combining the computer controlled robot of Kolosov et al with the elastomer testing protocol of Francisco et al because Kolosov et al has applied the computer controlled robot toward rheological studies (e.g. viscosity or elasticity). Therefore it would not have been unreasonable to apply the computer controlled robot as part of the method of Francisco et al because tensile strength is directly related to elasticity.

New Claim Rejection(s) - 35 USC § 103

Claims 15,16 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Francisco et al** (US Patent 5,308,522) **in view of Kolosov et al** (US Patent Application 2004/0123650 – IDS entry 2/16/2006) as applied to claim(s) 1-3,5-9, 11-14,17-21, 33-35 above, and further in view of **Chaffee et al** (US Patent 4,774,281; of record).

Francisco et al in view of Kolosov et al is relied on as above.

Francisco et al in view of Kolosov et al do not teach thermal conditioning of the elastomer at a temperature at about 100-200 degrees C for about 20 hours to about 60 hours, prior to immersing the elastomer in the oil/additive sample, such as set forth in claims 15 and 16.

Chaffee et al teach, throughout the document and especially column 2, line 43 thermal conditioning of a rubber stock at 177 degrees C for 22 hours.

It would have been *prima facie* obvious for one of ordinary skill in the art, at the time the claimed invention was made to apply the thermal conditioning of Chaffee et al. toward the elastomer testing protocol of Francisco et al in view of Kolosov et al

One of ordinary skill in the art would have been motivated to use the thermal conditioning of Chaffee et al in the elastomer testing protocol of Francisco et al in view of Kolosov et al because it would have provided an improved compression set, as noted by Chaffee et al in column 1, line 42.

One of ordinary skill in the art would have had a reasonable expectation of success in combining the thermal conditioning of Chaffee et al with the elastomer testing protocol of Francisco et al in view of Kolosov et al because Chaffee et al had applied thermal conditioning to silicone rubber. Therefore it would not have been unreasonable to apply thermal conditioning to the method of Francisco et al in view of Kolosov et al because silicone rubber is used for elastomers, such as discussed by Chaffee et al in the abstract.

Claims 4, 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Francisco et al** (US Patent 5,308,522) **in view of Kolosov et al** (US Patent Application 2004/0123650 – IDS entry 2/16/2006) as applied to claim(s) 1-3,5-9, 11-14,17-21, 33-35 and 15,16 above, and further in view of **Chaffee et al** (US Patent 4,774,281; of record) taken in view of **Migdal et al** (US Patent 5,062,980; of record) to show elastomers made of synthetic rubber and predetermined measurement thereof.

Francisco et al in view of Kolosov et al further in view of Chaffee et al is relied on as above.

Francisco et al in view of Kolosov et al further in view of Chaffee et al do not explicitly state an elastomer made from synthetic rubber, such as set forth in claim 4 or an elastomer elongation measurement compared to a predetermined measurement of the elastomer, as set forth in claim 10.

Migdal et al teach throughout the document and especially the abstract polysuccinimide compositions as dispersants for lubricating motor oils, which have greater compatibility with synthetic rubbers such as Viton ® engine seals.

Said Viton ® engine seals reads on claim 4.

Migdal et al in columns 13-14 teach testing compatibility of Viton ® engine elastomer seals with said dispersants for both tensile strength and elongation (see table II concerning % change in elongation upon contact with said polysuccinimide compositions). The original (prior to oil contact) elongation of the Viton ® engine seal is taken as the predetermined elongation measurement of claim 10.

It would have been *prima facie* obvious for one of ordinary skill in the art, at the time the claimed invention was made to test the amount of elongation in synthetic rubber elastomers upon treatment with additives such as dispersants per Migdal et al using the apparatus and/or protocol (system) afforded by the combined teachings of Francisco et al in view of Kolosov et al further in view of Chaffee et al.

One of ordinary skill in the art would have been motivated to test the amount of elongation in synthetic rubber elastomers upon treatment with additives such as

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dispersants per Migdal et al using the system afforded by the combined teachings of Francisco et al in view of Kolosov et al further in view of Chaffee et al because: (i) it is important that elastomer seals do not degrade in internal combustion engines and (ii) motor oil additives to prevent sludge and rust formation in modern engines must withstand imposed stresses such as low temperature stop-and-go service and high temperature conditions produced by high speed driving, as discussed by Migdal et al in column 2 lines 61-66 and column 1 lines 15-25.

One of ordinary skill in the art would have had a reasonable expectation of success in applying the apparatus and/or protocol afforded by the combined teachings of Francisco et al in view of Kolosov et al further in view of Chaffee et al toward analyzing the amount of elongation in synthetic rubber elastomers upon treatment with additives such as dispersants per Migdal et al because each reference concerns treatments for better performing rubber compositions (e.g. see Kolosov application claim 19; Chaffee et al abstract et al ; Migdal et al abstract; Francisco et al example 3 concerning silicone elastomers) In other words, the teachings of Migdal et al are well within the scope of technology according to each of Francisco et al , Kolosov et al and Chaffee et al.

In conclusion, the claimed invention was within the ordinary skill in the art to make and use at the time the claimed invention was made and was as a whole, *prima facie* obvious.

Maintained Double Patenting Rejection

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-3 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-4 of U.S. Patent No. 7,137,289 in view of Francisco et al (US Patent 5,308,522) and further view of Bailey et al (US Patent 3,108,397).

Instant claim 1 is drawn to a method of screening lubricating oil compositions for compatibility with elastomers comprising the steps outlined above.

Reference claim 1 is drawn to a method of screening lubricating oil compositions for dispersancy performance using the same steps as the instant invention, plus adding sludge.

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The limitations of instant claims 2-3 are reflected in claims 2-4 of US Patent 7,137,289.

The instant claimed invention differs from application 11/528747 in measuring dispersancy and the addition of sludge and elastomers.

Francisco et al teach throughout the document and especially example 3, stress activated activators (I and II) for lubricant compositions which are tested on an elastomer.

Bailey et al teach, throughout the document and especially paragraphs 2 and 3 of column 1, measuring lubricating oil dispersancy in an effort to prevent sludge formation.

One would have been motivated to measure dispersancy with the instant method because it would have promoted engine cleanliness, important according to Bailey et al in column 1, line 40.

Discussion

Because applicant has not persuasively argued against the merits of the above double patenting rejection, nor has filed a terminal disclaimer, nor has requested review from the Board, the rejection is hereby maintained.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHRISTOPHER M. GROSS whose telephone number is (571)272-4446. The examiner can normally be reached on M-F 9:30-6:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Low can be reached on 571 272 0951. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Christopher M Gross
Examiner
Art Unit 1639

cg

/ Christopher S. F. Low /
Supervisory Patent Examiner, Art Unit 1639

/George C. Elliott, Ph.D./

Director, Technology Center 1600